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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/626,993	07/24/2003	Gerald K. Hein		4168

7590 07/06/2005

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EXAMINER

CARPIO, IVAN HERNAN

ART UNIT PAPER NUMBER

2841

DATE MAILED: 07/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/626,993

Applicant(s)

HEIN, GERALD K.

Examiner

Ivan H. Carpio

Art Unit

2841

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 2 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 2 states that there is no direct attachment between the heat sink assembly and the mounting member, figures 1 and 2 of the specification demonstrate that the mounting member (40) is inserted between the body portion (16) and the angled washer (24) of the heat sink (10) thereby making the mounting member directly attached to the heat sink. Furthermore for low thermal resistance to be achieved it is required that the heat sink be directly attached to the mounting member, for these reasons this claim is not enabled. Art has not been applied to this claim.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Pearson. (See marked up figures attachment I)

With respect to claim 1 Pearson teaches a heat sink assembly (Fig. 5) for removing heat from a semiconductor device (column 1, line 8) integrated circuit used in an electronic equipment apparatus, comprising a heat sink member (Fig. 5) having a body portion (Fig. 5, element 1) and a mounting portion (Fig.5, element 2) and attachable to the semiconductor integrated circuit (fig. 5 note the heat sink is attached to the semiconductor device), and a resilient mounting assembly (Fig. 5, element 3) positioned on the mounting portion of the heat sink member and arranged to permit the heat sink to be removably mounted (Fig. 5 note the screw threads on the mounting assembly) on a mounting member (Fig.5, element 4) which in turn is attachable to or part of a chassis portion (Fig. 5 note that mounting member 4 is capable of being attached to a chassis in a variety of known ways such as soldering or press fitting techniques) of the electronic equipment apparatus, wherein the mounting portion includes means for holding (Fig. 5 note the spring and screw thread on the mounting portion) the heat sink member to the mounting member when the heat sink assembly is operatively positioned on the mounting member.

With respect to claim 3 and with all the limitations of claim 1, Pearson teaches that the mounting portion (Fig.1, element 2) includes a base member (Fig.5, element 6)

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and an upper member (Fig.5, element 7) which extends upwardly from the base member, the upper member having a slightly smaller cross-section than the base member, and wherein the mounting portion further includes an angled washer (Fig. 5, element 8) positioned on the base member, a spring element (Fig.5, element 9) mounted about the upper member above the washer, and a retainer element (Fig. 5, element 10) positioned above the spring element to hold the spring element on the upper member, and wherein in use the mounting member fits between the washer and the body portion (fig. 5) of the heat sink member, and wherein the spring element in action tends to hold the heat sink assembly and the mounting member together (Fig. 5 note that when the spring is in action the mounting member and the mounting portion are in direct contact) in a lower thermal resistance arrangement.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patents 4546408, 6140591, 5339215 and 6331937 all have the same physical structure.

### ***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ivan H. Carpio whose telephone number is 571-272-8396. The examiner can normally be reached on M-R 6:00am - 4:30pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kammie Cuneo can be reached on 571-272-1957. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

IC

  
KAMAND CUNEO  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2841

U.S. Patent

Dec. 31, 2002

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US 6,501,658 B2

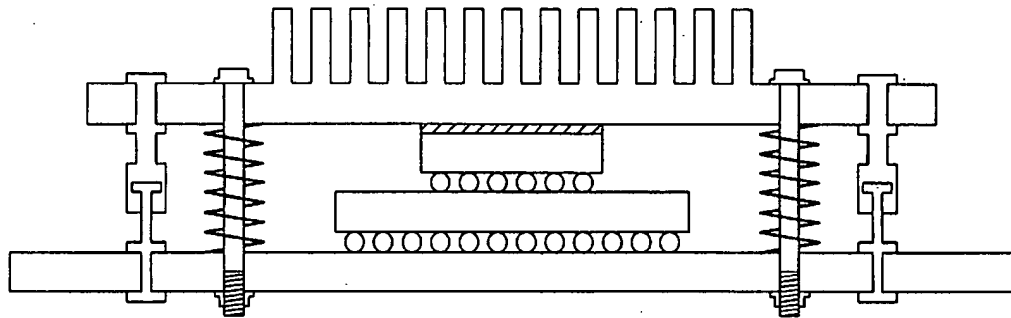


Fig. 4

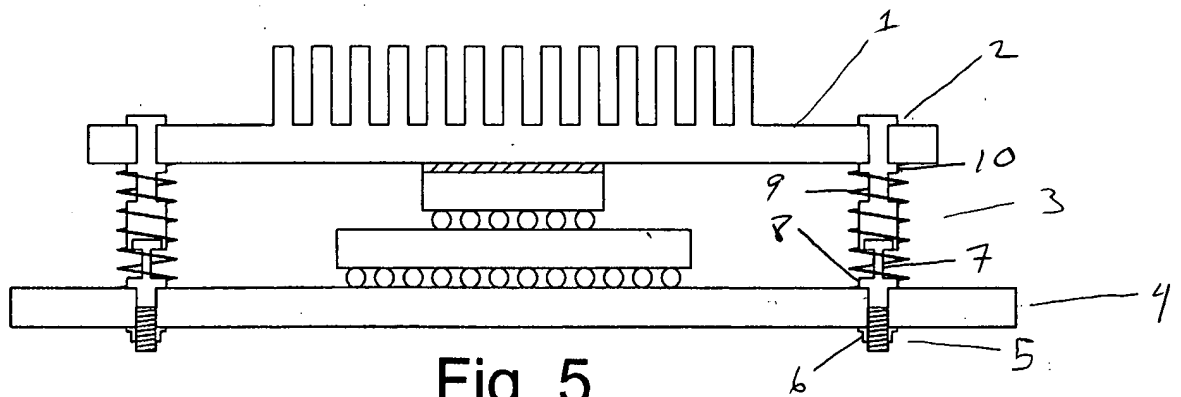


Fig. 5

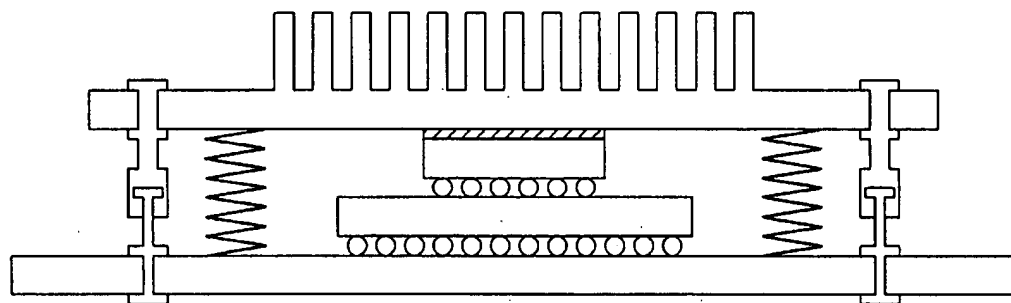


Fig. 6